

## Refine Search

### Search Results -

Terms	Documents
707/204 and (snapshot\$1 or mirroring\$1) and mismatch	25

Database:

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 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
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Search:






### Search History

DATE: Wednesday, April 11, 2007    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L27</u>	707/204 and (snapshot\$1 or mirroring\$1) and mismatch	25	<u>L27</u>
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<u>L25</u>	707.clas. and (snapshot\$1 or mirroring\$1) and mismatch	138	<u>L25</u>
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<u>L20</u>	711/114	4223	<u>L20</u>
<u>L19</u>	707/200	5883	<u>L19</u>
<u>L18</u>	707/201 and mirroring and mismatch	1	<u>L18</u>
<u>L17</u>	L16 not @py>1996	1	<u>L17</u>
<u>L16</u>	L15 and mismatched	35	<u>L16</u>
<u>L15</u>	L14 and (copy\$ or mirror\$) near (data or information)	2311	<u>L15</u>
<u>L14</u>	(databases or data with bases) near access	31075	<u>L14</u>

<u>L13</u>	707/102	9688	<u>L13</u>
<u>L12</u>	711/163	2601	<u>L12</u>
<u>L11</u>	711/162	3301	<u>L11</u>
<u>L10</u>	711.clas.	34173	<u>L10</u>
<u>L9</u>	707.clas.	42482	<u>L9</u>
<u>L8</u>	715.clas.	29227	<u>L8</u>
<u>L7</u>	715/500	1436	<u>L7</u>
<u>L6</u>	707/500	1690	<u>L6</u>
<u>L5</u>	707/1	9375	<u>L5</u>
<u>L4</u>	707/204	3609	<u>L4</u>
<u>L3</u>	707/203	3982	<u>L3</u>
<u>L2</u>	707/202	2805	<u>L2</u>
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L26: Entry 2 of 7

File: USPT

Apr 2, 1996

US-PAT-NO: 5504879

DOCUMENT-IDENTIFIER: US 5504879 A

TITLE: Resolution of relationship source and target in a versioned database management system

DATE-ISSUED: April 2, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Eisenberg; Neal R.	San Jose	CA		
Huddleston; Robert L.	Sunnyvale	CA		
Karasiuk; Gary R.	Keswick			CA
Lehner; Mary C.	San Jose	CA		
Tribolet; Charles S.	Morgan Hill	CA		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
International Business Machines Corporation	Armonk	NY				02

APPL-NO: 07/914903 [\[PALM\]](#)

DATE FILED: July 16, 1992

INT-CL-ISSUED: [06] G06F 17/30

## INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	<a href="#">G06 F 9/44</a>	20060101

US-CL-ISSUED: 395/600; 364/DIG.1, 364/282.1, 364/282.3

US-CL-CURRENT: [707/100](#); [707/203](#)

FIELD-OF-CLASSIFICATION-SEARCH: 395/600

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

<input type="checkbox"/>	<u>4646229</u>	February 1987	Boyle	395/600
<input type="checkbox"/>	<u>4912637</u>	March 1990	Sheedy et al.	395/600
<input type="checkbox"/>	<u>5303367</u>	April 1994	Leenstra, Sr. et al.	395/600
<input type="checkbox"/>	<u>5315709</u>	May 1994	Alston, Jr. et al.	395/600
<input type="checkbox"/>	<u>5317729</u>	May 1994	Mukherjee et al.	395/600
<input type="checkbox"/>	<u>5386559</u>	January 1995	Eisenberg et al.	395/600

## OTHER PUBLICATIONS

"ISPF/PDF Software Configuration and Library Manager (SCLM) Guide and Reference," Version 3 Release 4 for MVS, IBM Publication SC34-4254-02, Jul. 1992.

Feiler, "Configuration Management Models in Commercial Environments," Technical Report CMU/SEI-1-TR-7, ESD-91-TR-7, Mar. 1991, Software Engineering Institute, Carnegie Mellon University, Pittsburgh, PA 15213.

"IBM Configuration Management Version Control Concepts", International Business Machines Corporation (Jun., 1993), pp. iii-86.

ART-UNIT: 237

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Amsbury; Wayne

ATTY-AGENT-FIRM: Baker, Maxham, Jester & Meador

## ABSTRACT:

A versioned data management system is provided with a method for resolving sources and targets of relationships. For each entity instance, a lifetime ID is recorded. When the add interface is used to add an entity, a value is assigned to the lifetime ID, which value has never been used before for an instance of the entity type. When the update interface is used to update an entity, the lifetime ID is maintained unchanged. If the update results in a new version, the new version is given the same lifetime ID value as that for the version that was the basis for the update. If the delete interface is then used to delete the entity, and the add interface is later used to add an instance with the same part key, that instance will have a different lifetime ID. For each relationship instance, lifetime IDs are recorded for the relationship, its source, and its target. When the add interface is used to add a relationship, a value is assigned to the lifetime ID, which value has never been used before for an instance of the relationship type. Also, the lifetime IDs of the source and target of the relationship are recorded in the relationship instance. The lifetime ID of the relationship and the lifetime IDs of the source and target are maintained unchanged. If an update results in a new version of the relationship, the new version is given the same lifetime ID value as that for the version that was the basis for the update.

14 Claims, 17 Drawing figures

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TITLE: Resolution of relationship source and target in a versioned database management system

Brief Summary Text (6):

A significant problem in maintaining any data base whose data entries represent objects, events, people, or relationships in the real world, is that although those things may change over time, the typical DBMS maintains only a single version of any given entry, making it impossible to concurrently represent a thing in its past, present, and future states. A second significant problem, which arises in maintaining a data base which is shared among a plurality of users, involves the toleration of concurrent but independent work on the same data entries by different users without sacrificing the semantic consistency of the data. Yet a third problem in maintaining a data base involves maintaining a record of the state of the data base itself as it existed at given times in the past. Such information is often needed for error recovery and for audit-trail purposes. Typical solutions to this problem involve taking "snapshots" of the data base and logging change activity, so that if necessary the data base can be "reconstructed" as it existed at some point in the past. This reconstruction is usually a time-consuming batch procedure, and a system so constructed cannot allow the past and current data bases to be accessed concurrently.

Detailed Description Text (216):

force-required flag (CHARACTER (1)) A value of 1 indicates that the instance can only be promoted using the promote-force tool because an earlier promote attempt failed due to a time stamp mismatch. 0 indicates that the instance can be promoted by the normal means. (See 6.0, PROMOTE.)

Current US Class (1):707[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)